



**Tufts Medical Center
Lemuel Shattuck Hospital**
Transitional Year Program



Educational Goals and Objectives for Nephrology

**Location: Tufts Medical Center
Lahey Clinic
Lemuel Shattuck Hospital/Carney Hospital**

Type of Rotation: Elective

Length of Rotation: 4 weeks

Educational Goals

The primary goal is to provide TY Residents with experience in the general approach to the renal patient. TY Residents are exposed to a broad range of problems including acute renal failure, fluid and electrolyte disorders (dysnatremias, acid base disorders, and potassium imbalances), glomerular disease, chronic renal insufficiency, end stage renal disease, modalities of dialysis and hypertension. Residents are expected to gain facility with the general approach to the renal patient and a fundamental understanding of renal pathophysiology.

Educational Methods

Individual Presentation and Discussion of Cases

TY Residents will see a variety of renal problems. The resident will present a focus-based detailed history and physical examination to the attending nephrologist. In each case, an attending nephrologist personally interacts with the patient and together with the resident helps to recommend a course of treatment to the referring team of physicians. For patients admitted to the Nephrology service, the residents will present the patient history and physical and develop and implement a treatment plan in conjunction with the attending nephrologist. The attending nephrologist will personally interview and examine these patients on a daily basis.

The case discussions center on the differential diagnosis, the pathophysiology involved, the interpretation of examination findings, the interpretation of laboratory results (including urinary sediments) and imaging studies, and the decision-making process necessary to recommend and implement appropriate treatment.

Principle Educational Goals Based on the ACGME General Competencies

In the tables below, the principle educational goals of the Nephrology curriculum are listed for each of the six ACGME competencies:

- 1) Patient Care
- 2) Medical Knowledge
- 3) Practice-Based Learning and Improvement
- 4) Interpersonal and Communication Skills
- 5) Professionalism
- 6) Systems-Based Practice

The abbreviations for the types of learning environments and evaluation methods are defined below.

Learning Environments:

DPC: Direct patient care

ARD: Attending rounds/didactics

Evaluation Methods:

ME Monthly evaluation

MCX: Mini-Cex

1.) Patient Care

Objective	Learning Environment	Evaluation Method
Perform a comprehensive history and physical examination	DPC, ARD	ME, MCX
Formulate and carry out effective management plans	DPC, ARD	ME
Clearly and succinctly document patient management in the medical record	ARD	ME, MCX
Perform a focused physical exam	DPC, ARD	ME, MCX

2.) Medical Knowledge

Objective	Learning Environment	Evaluation Method
Competently identify renal issues in outpatients and inpatients especially renal emergencies (such as hyperkalemia, severe acidemia and intoxications requiring dialysis), fluid and electrolyte disorders, vasculitis, acute renal failure, glomerular disease, hypertension (primary and secondary), chronic renal insufficiency and end stage renal disease	DPC, ARD	ME
Accurately interpret laboratory data, including urinary sediments	DPC, ARD	ME
Apply basic knowledge of renal pathophysiology to the diagnostic and therapeutic process Formulate a broad differential diagnosis Acquire expeditiously relevant clinical literature to enhance direct patient care	DPC, ARD	ME

3.) Practice-Based Learning and Improvement

Objective	Learning Environment	Evaluation Method
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Identify deficiencies in knowledge base and develop independent reading program to address these gaps	ARD	ME
Effectively perform a literature search to answer clinical questions	ARD	ME
Facilitate the learning of students and other health care providers	ARD	ME

4) Interpersonal & Communication Skills

Objective	Learning Environment	Evaluation Method
Communicate accurately and compassionately with patients and their families	DPC, ARD	ME, MCX
Clearly communicate with referring physicians and those providing direct care for the patient	DPC	ME
Professionally interact with entire health care team	DPC, ARD	ME

5) Professionalism

Objective	Learning Environment	Evaluation Method
Treat all patients, patients' families, health care providers and hospital employees with respect and integrity	DPC, ARD	ME
Maintain patient confidentiality at all times	DPC, ARD	ME

6) Systems-Based Practice

Objective	Learning Environment	Evaluation Method
Integrate case management early and effectively in patient care	ARD	ME
Understand the role of clinical pathways in managing disease	ARD	ME
Implement and review clinical pathways	ARD	ME

Nephrology Curriculum Checklist

Acid-base disorders
Acute renal/failure
Acute (ischemic) tubular necrosis
Drug-induced (radiocontrast, analgesics, etc.)
Interstitial
Atheroembolic
Chronic renal/failure
Conservative management (before dialysis)
Hemodialysis
Peritoneal dialysis
Transplantation
Fluid and electrolyte disorders
Glomerular diseases
Acute glomerulonephritis
Chronic glomerulonephritis
Nephrotic syndrome
Hypertension
Hypertensive crisis
Secondary hypertension
Inherited diseases
Polycystic kidneys
Kidney disease in systemic illness
Diabetes mellitus
Hypertension
Other systemic diseases
Neoplasia
Bladder carcinoma
Renal cell carcinoma
Nephrolithiasis
Diagnosis of renal stone
Management of acute colic
Obstructive uropathy
Urinary tract infection
Cystitis